

XXVI.—*Diagnoses of some Lichens.*

By Prof. Dr. C. MERESCHKOVSKY.

DURING the last ten years I have described, in various publications, quite a number of new lichens. As, with a few exceptions, I did not conform with the international convention requiring a Latin diagnosis, I have considered it desirable to add here to my previous descriptions in Russian or French short Latin diagnoses for the greater number of new forms.

All my collections and notes having been left in Russia, I regret that in some cases the diagnoses are not so complete as they might be.

Usnea florida, var. *divaricata*, Mer.

Mereschkovsky, Addit. Lichenogr. Ross. i., Oest. Bot. Zeitschr. 1921.

Thallus mediocris, circiter 7–8 centim. longus, erectus, ramis divaricatis, fibrillis numerosis ut in *Usnea barbata* typica munitis.

Spec. orig. (numeros.)* in herb. meo Kazani.
Rossia Media, Esthlandia.

Usnea hirta, forma *minutissima*, Mer.Mereschkovsky, Beitr. z. Kenntn. Flecht. Reval, Kazan, 1909, p. 10 ;
id. Lich. Rossiae exsicc. no. 53.

Thallus minutus, 2–3 centim. haud superans, pulvinulas haud formans, parce sorediatus vel nudus, semper sterilis.

Spec. orig. (numeros.) in herb. meo Kazani.
Rossia Media, Fennia, Tauria. Etiam in Gallia! et Helvetia!

Usnea plicata, forma *vagans*, Mer.

Mereschkovsky, Beitr. z. Kenntn. Flecht. Reval, Kazan, 1909.

Thallus elongatus, subscabrosus, liberus, substrato haud affixus.

Spec. orig. in herb. meo Kazani.

The absence of any trace of damage shows that they are not simply fragments torn off from normal specimens.

Esthland ; Reval, living on trunks of *Pinus*.

* “(numeros.)” means at least twenty good, identified specimens ;
“(numerosissim.)” about one hundred specimens.

Ramalina calicaris, var. *taurica*, Mer.

Mereschkovsky, "Notes sur quelques *Ramalina* de Russie," Bull. Soc. bot. d. Genève, t. xi. 1919, p. 152, fig. 1, c.c.

Thallo parvulo, altitudine circiter 3 centim., laciniis angustis, circiter 1-1.5 millim. latis, haud canaliculatis. Apotheciis ramulis appendiculariis, latitudine 1.5-3 millim., cupuliformibus. Sporibus rectis vel interdum subasymmetricis.

Conf. cum *Ramalina elegans* (Bagl.-Car.), Stizenb.

Spec. orig. in herb. meo Kazani.

Tauria. Ad ramulos *Celtidis australis*.

Forma *macrocarpa*, Mer.

Mereschkovsky, *l. c.* p. 153, fig. 1, b.

Apotheciis majoribus, latitudine circiter 5 millim., marginibus tenuioribus, haud involutis, receptaculo subtus reticulatis, ramulo appendiculario destitutis.

Spec. orig. in herb. meo Kazani.

Tauria. Ad ramulos *Celtidis australis*.

Forma *tenella*, Mer.

Mereschkovsky, *l. c.* p. 153, fig. 1, a.

Laciniis angustioribus, vulgo 0.5 millim. (0.3-0.7 millim.) latis, ad apicem attenuatis acuminatisque; apotheciis minoribus, latitudine 0.5-0.8 millim.

Spec. orig. in herb. meo Kazani.

Tauria. Ad ramulos *Celtidis australis*.

Ramalina pollinaria, forma *elegantella*, Mer.

Mereschkovsky, Nachtrag zur Flechtenliste aus d. Umgegend Revals, Kazan, 1913, p. 59.

Thallus pulvinulus parvas formans, laete cinereo-glaucescens, coriaceus, laciniis brevibus, erectis, passim latioribus, apicibus suberosis.

Spec. orig. (numeros.) in herb. meo Kazani.

Esthlandia, Reval.

Var. *humilis*, forma *conglobata*, Mer.

Mereschkovsky, *l. c.* Hedwigia, 1919, p. 190.

Thallus minor quam in var. *humili*, densior, pulvinulos subglobosas formans.

Spec. orig. (numeros.) in herb. meo Kazani.
Esthlandia, Reval.

Ramalina populina, forma *laxiuscula*, Mer.

Mereschkovsky, Nachtrag zur Flechtenl. Umgeg. Revals, Kazan, 1913;
id. Contrib. fl. lich. Crimée, Ann. d. Sc. nat. Botanique, 1921 (cum
fig.).

Thallus ut in typo, sed laciniis magis laxiusculo dispositis.

Spec. orig. in herb. meo Kazani.
Esthlandia, Tauria.

Evernia thamnodes, forma *furfurascens*, Mer.

Mereschkovsky, Contrib. fl. lich. envir. Kazan, Hedwigia, 1919, p. 193.

Thallus obscurior, cyanescente-viridis, dense isidiis elongatis sore-
diosisque omnino obtectus.

Spec. orig. (numeros.) in herb. meo Kazani.
Kazan (Rossia Media).

Forma *parva*, Mer.

Mereschkovsky, Contrib. lich. gouv. Vladimir, Arbeit. (Trudy) d.
Naturforschges. Univ. Kazan, 1911; etiam in Hedwigia, 1919, p. 193.

Thallus parvus, altitudine circiter 1–2 centim.

Spec. orig. (numeros.) in herb. meo Kazani.
A form analogous with the form *minutissima*, Mer., of
Usnea hirta, with which it is often associated.
Rossia Media.

Forma *subnuda*, Mer.

Mereschkovsky, Contrib. fl. lich. envir. Kazan, Hedwigia, 1919, p. 193.

Thallus lætior, stramineus, levis, esorediosus vel vix solediosus.

Spec. orig. in herb. meo Kazani.
Comparanda cum forma *esorediosa*, Hue.
Rossia Media (Kazan) et Sibiria.

Cetraria crispera, forma *albinea*, Mer.

Mereschkovsky, Addit. Lichenogr. Ross. i., Oest. Botan. Zeitschr. 1921.

Thallus erectus vel suberectus, cæspitosus, haud vel parce crispus,
albidus, subtus interdum passim albus, basin versus fulvescens.

Spec. orig. in herb. meo Kazani.
Sibiria.

Forma *vagans*, Mer.

Mereschkovsky, Nachtrag zur Flechtenl. Umgeg. Revals, Kazan, 1913.

Spec. orig. (numerossim.) in herb. meo Kazani.

Cetraria tenuissima, forma *stepposa*, Mer.

Mereschkovsky, Contrib. fl. lich. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallus liberus, *opacus*, laciniis paullulum minus attenuatis.

Spec. orig. (numerossim.) in herb. meo Kazani.

Rossia meridio-orientalis, Tauria.

Forma *vagans*, Mer.

Mereschkovsky, Nachtrag zur Flechtenl. Umgeg. Revals, Kazan, 1913.

Thallo libero, nitido, sphæroideo-rotundato, ramulis circa ut in typo.

Spec. orig. (numerossim.) in herb. meo Kazani.

Esthlandia, Reval.

Parmelia camtschadalis, forma *ampliata*, Mer.

Mereschkovsky, Addit. Lichenogr. Ross. ii., in Annuaire du Conservat. et Jard. bot. d. Genève, vol. xxi. 1921.

Laciniis latoribus, lanceolatis; apotheciis minoribus, circiter 1.5 millim. latis, ad superficiem thalli disseminatis.

Spec. orig. (1) in herb. Conservat. botan. Genevæ, (2) in herb. Brit. Mus.

Camtschatka.

Forma *subnuda*, Mer.

Mereschkovsky, *l. c.*

Thallus laciniis abbreviatis, subtus glabris, rhizinis destitutis vel rarissime brevissimis, ad margines hinc inde parce rhizinis ornatis.

Spec. orig. in herb. Conservat. botan. Genevæ.

Camtschatka.

Parmelia conspurcata, forma *subdispersa*, Mer.

Mereschkovsky, Sched. ad Lich. tic. exs. (no. 82), in Annuaire du Conservat. et Jard. bot. d. Genève, vol. xxi. 1919, p. 200.

Thallus paullulum letior, castaneus, e lobis subdispersis, rosulas haud vel raro formantibus, compositus. $\text{CaCl}_2\text{O}_2 +$.

Spec. orig. (1) in herb. Conservat. botan. Genève, (2) in Mereschkovsky, Lich. ticin. exs. no. 82.
Geneva (Helvetia).

Forma velutina, Mer.

Mereschkovsky, Contrib. lich. Vladimir Arbeiten (Trudy) d. Naturf.-Ges. Univ. Kazan, 1911.

Pars centralis thalli ob iridio denso velutina.

Spec. orig. in herb. meo Kazani.
Rossia Media.

Parmelia physodes, forma *compacta*, Mer.

Mereschkovsky, Beitr. Kenntn. Flecht. Umgeg. Revals, Kazan, 1909.

Thallus compactus, laciniis mutuo pressione longitudinaliter subcarinatis, centro irregulariter contortu-plicatis.

Spec. orig. (numeros.) in herb. meo Kazani. *Spec. a Long* missum haud optimum.
Esthlandia, Fennia.

Forma elegans, Mer.

Mereschkovsky, Contrib. fl. lichénol. Kazan; Hedwigia, 1919, p. 97, tab. ii. figs. 3, 4.

Thallus rosulas 1.5-5 centim. latas formans, tenuiter elegantiorque dissectus, incisiones foraminas rotundas formans.

Spec. orig. (numeros.) in herb. meo Kazani.
Ad saxa arenacea in Fontainebleau (Gallia).

Forma pinnata, Mer.

Mereschkovsky, Addit. Lich. Rossiae, i, Oesterr. Botan. Zeitschr. 1921.

Thallo superne albido, nitidiusculo, lobis planiusculis, angustioribus, discretis, pinnatiforme dissectis a forma typica valde differt.

Spec. orig. in herb. meo Kazani.
Sibiria.

Forma vittatoides, Mer.

Mereschkovsky, Nachtr. Flechtenl. Umgegend. Revals, Kazan, 1913; id. Contrib. fl. lichén. envir. Kazan, Hedwigia, 1919, p. 197, tab. ii. fig. 2.

Thallus effusus, rosulas nondum formans, laciniis valde discretis, laxè ad substratum affixis, subimbricato-superpositis, angustis,

0·7–1 millim., raro ultra latis, sublinearibus, palmatim subdichotomicè divisis, hinc inde nigro-marginatis; thallus haud sorediosus, colore ut in typo.

Spec. orig. (numerossim.) in herb. meo Kazani.

Confer. cum forma *stenophylla*, Harm. Lich. d. Fr. p. 507.

Esthlandia; Austria.

Parmelia prolixa, var. *tenuisecta*, Mer.

Mereschkovsky, Contrib. fl. lichén. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallus liberus vel laxè rhizinis brevibus rarisque ad granulos terræ stepparum adfixus, minutus, circiter $\frac{1}{2}$ centim. latus, nigrescens, nitidus, valde irregulariterque dissectus, laciniis discretis, angustis, irregularibus, marginibus quasi erosis; subtus pallidus, subcaniculatus. Sterilis.

Spec. orig. (numerous.) in herb. meo Kazani.

Tauria.

Parmelia saxatilis, forma *plumbea*, Mer.

Mereschkovsky, Nachtrag z. Flechtenl. Umgeg. Revals, Kazan, 1913.

Thallo cinereo-obscurò vel cinereo-plumbeo, isidiis ut in forma *aizonii*.

Spec. orig. (numerous.) in herb. meo Kazani.

Esthlandia, Reval.

Parmelia sorediata, forma *tenuatula*, Mer.

Mereschkovsky, Nachtrag z. Flechtenl. Umgeg. Revals, Kazan, 1913.

Thallo minore, lobis angustissimis a typo differt.

Spec. orig. (numerous.) in herb. meo Kazani.

Esthlandia, Reval.

Parmelia sulcata, forma *nitida*, Mer.

Mereschkovsky, Beitr. z. Kenntn. d. Flecht. Umgeb. v. Reval, Kazan, 1909 (sub var. *lævis*); vide etiam Hedwigia, 1919, p. 199.

Thallus cinereus ut in typo, haud albidus, nitidus, lævis vel passim rugulosus, esorediatus, laciniis discretis, elongatis, adnatis, linearibus, 2–3 millim. latis, apicibus haud fusciscentibus.

Spec. orig. in herb. meo Kazani.

Rossia Media; Esthlandia.

Forma tuberosa, Mer.

Mereschkovsky, Beitr. z. Kenntn. d. Flecht. Umgeb. v. Reval, Kazan, 1909; id. Contrib. fl. lich. envir. Kazan, Hedwigia, 1919, p. 199, tab. ii. fig. 1.

Thallus rosulas parvas, 2-3 centim. (usque ad 4.5 centim.) latas formans, compactus, laciniis brevibus, late-rotundatis, circiter 4 millim. latis, concretis, subimbricatis, centro irregulariter tuberosus.

Spec. orig. (numeros.) in herb. meo Kazani.
Rossia Media; Esthlandia*.

Parmelia taurica, Mer.

Mereschkovsky, Schedulæ ad Lich. Rossiaë exsiccatos, Kazan, 1913; id. Contrib. fl. lichén. Crimée, Ann. d. sc. nat. Botanique, 1921 (cum fig.).

Thallus liberus, circiter 2.5-3.5 (1.5-5) centim. latus, plus minus compressus, parce irregulariterque ramosus, fuscus, opacus, utrinque similis, interdum ad apicem solum ambi lateris subinælibus; superficie inæqualiter subplicato-rugosus, neque sorediosus, nec isidiosus; laciniis circiter 0.5 millim. latis, subteretis vel tereti-compressis, apicibus sæpe breviter bifurcatis, rhizimis omnino destitutus. Semper sterilis.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 7.

Tauria et in steppas Kirgisorum.

Forma congesta, Mer.

Mereschkovsky, Contrib. fl. lichénol. d. l. Crimée, in Ann. d. sc. nat. Botanique, 1921 (cum fig.).

Thallus minor, circiter 1.5-2 centim. (0.7-2.6 centim.), congestus, verrucoso-vel granuloso-perrugatus, ambitu lobis discretis destitutus vel parce sparsim abbreviatis.

Spec. orig. (numeros.) in herb. meo Kazani.
Tauria.

Parmelia vagans, forma *elegans*, Mer.

Mereschkovsky, Schedul. ad Lich. Rossiaë exsiccatos, Kazan, 1913 (no. 58).

Thallo minore, subtus nigro, laciniis angustioribus, marginibus magis revolutis, sæpe conniventibus a forma typica differt.

* The forma *farinosa*, Mer., which I have described in 'Hedwigia,' 1919, p. 198, is nothing else but the var. *pruinosa*, Harm. ('Lichens de France,' p. 567).

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 58.

Rossia Media; Astrachan; Tauria; Caucasus.

Var. *sibirica*, Mer.

Mereschkovsky, Additam. ad Lichenogr. Rossiaë, i., Oesterr. Bot. Zeitschr. 1921.

Thallus minor, magis applanatus, rosulas circiter 1.5–2 centim. latas formans, laciniis brevibus, planiusculis, subtus pallidus. Sterilis.

Spec. orig. in herb. meo Kazani.

Siberia: Irkutsk (Vercholensk).

Squamaria crozalsiana, Mer.

Thallus crassiusculus, effusus, pallido-albescens, centro irregulariter gyroso-areolatus, areolis convexis, confertis, ambitu laciniis parum evolutis. Apothecia rarissima; sporæ simplices, incolores. Ad saxa calcarea murorum.

Spec. orig. (numeros.) in herb. meo Kazani.

Beziers (Hérault), Gallia.

Squamaria muralis, var. *brunneola*, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos, Kazan, 1913.

Thallo lobis applanatis sicut in forma typica et colore thalli brunneolo ut in *Squamaria garovaglii*.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 14, (3) in herb. Conservat. botan. Genevæ. Tauria, Helvetia (Lugano)!

Comparanda cum forma *riparium*, Flot. Koerber Syst. p. 115.

Forma *tenuisecta*, Mer.

Mereschkovsky, Contrib. fl. lichén. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921 (cum fig.).

Laciniis angustioribus, circiter 0.2–0.3 millim. latis, tenuiter dissectis.

Spec. orig. in herb. meo Kazani.

Tauria.

Var. *maroccana*, Mer.

Mereschkovsky, Contrib. lich. Vladimir Travaux (Trudy) d. l. soc. d. Natural. d. l'Univ. d. Kazan, vol. xlii. 1911.

Apotheciis convexis, pallidis.

Spec. orig. in herb. meo Kazani.

Gubernia Astrachan. Etiam in Marocco occurrit! (vide exempl. in herb. meo). Forsan melius ut forma considerenda.

Var. *orientalis*, Mer.

Mereschkovsky, Addit. ad Lichenogr. Rossiaë, i., Oesterr. Bot. Zeitschr. 1921.

Thallus stramineus, nitidus, lobis carinato-convexis.

Spec. orig. in herb. meo Kazani.

Asia Media, in jugo Mugodshary in provincia Ural.

Squamaria pruinosa, var. *chersonensis*, Mer.

Mereschkovsky, Contrib. fl. lichénol. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallus parve vel vix pruinosis, centro versus obscurior, sublividus, apothecia fusco-nigra, nuda vel leviter pruinosa.

Spec. orig. in herb. meo Kazani.

Tauria.

Var. *griseola*, Mer.

Mereschkovsky, Addit. ad lichenogr. Rossiaë, ii., in Annuaire du Conservatoire et Jard. bot. d. Genève, vol. xxi. 1921.

Thallus dense pruinosis, griseolus (haud albus ut in typo), apothecia pruinosa.

Spec. orig. in herb. meo Kazani.

Tauria.

Forma *conferta*, Mer.

Mereschkovsky, *l. c.*

Thallus griseolus, apothecia numerosissima, conferta, elevata, mutuo pressione irregulares flexuosaque.

Spec. orig. ibidem.

Tauria.

Squamaria rubina, forma *monophylla*, Mer.

Mereschkovsky, Addit. ad lichenogr. Rossiaë, i., Oesterr. Bot. Zeitschr. 1921.

Thallus monophyllus rosulas parvas subapplanatas formans.

Spec. orig. (numeros.) in herb. meo Kazani.

Ural in gubern. Perm.

Squamaria teichotea, forma *obscura*, Mer.

Apotheciis obscurioribus, nigricantibus vel nigris.

Spec. orig. in herb. meo Kazani.
Italia, Capri, ad saxa calcarea.

Lecanora albella, var. *peralbella*, forma *superfusa*, Mer.

Mereschkovsky, Nachtr. z. Flechtenliste Umgeg. Revals, Kazan, 1913.

Apothecia parva, distantes, haud angulosa, disco plano, dense pruinoso.

Spec. orig. (numeros.) in herb. meo Kazani.
Esthlandia: Reval.

Lecanora albescens, forma *confertiuscula*, Mer.

Mereschkovsky, Matér. p. une Monogr. d. genre *Lecanora*.

Lecanora albescens, forma *verrucosa*, Mer. Nachtr. z. Flechtenl. Umg. Revals, Kazan, 1913 (errore).

Thallus parum evolutus, haud effusus, insulas interdum plus minusve orbiculares formans. Apothecia ut in typo, sed agglomerata confertaque, mutuo pressione plus minusve praesertim centrum versus valde elevata, pulvinulos formans, nondum in thallo immersa.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Tabulæ Generum Lichenum (1913), *Lecanora*, i. no. 32.
Esthlandia: Reval.

Forma *granulosa*, Mer.

Mereschkovsky, *l. c.* etiam in hujus Tabulæ Generum Lichenum, *Lecanora*, i. no. 33.

Thallus albus, e granulis minutis subdispersis vel dispersis compositus, apotheciis minoribus.

Spec. orig. in herb. meo Kazani et in Tab. Gen. Lich.
Esthlandia: Reval.

Var. *dispersa*, forma *aggregata*, Mer.

Mereschkovsky, *l. c.* etiam in hujus Tabulæ Generum Lichenum, *Lecanora*, i. no. 36 (e Pyren.-Orient.).

Thallo albo, hinc inde visibili, apotheciis partim aggregatis.

Spec. orig. in herb. meo Kazani et in Tab. Gen. Lich.
Esthlandia: Reval. Pyren.-Orient. (Gallia).

Var. *muralis*, forma *obscura*, Mer.Mereschkovsky, *l. c.*

Apotheciis obscuris, nigricantibus. Ad muros calcareo et cementum earum.

Spec. orig. in herb. Conservat. botan. Genevæ.
Geneva (Helvetia).*Lecanora atra*, var. *urceolata*, Mer. (Mass. in herb.).Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos, Kazan, 1913
(no. 60).

Apothecia thallo immersa, habitu valde apothecia Aspiciliarum commemorant. Ad saxa dioritica.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky,
Lich. Ross. exs. no. 60.
Tauria.*Lecanora campestris*, forma *subimmersa*, Mer.Mereschkovsky, *l. c.*, etiam in hujus Tabulæ Generum Lichenum (1913),
Lecanora, ii. no. 41 (ex Agde, Hérault (Gallia)).

Apotheciis nigrescentibus, in thallo cinereo subimmersis.

Spec. orig. (1) in herb. meo Kazani, (2) in Tab. Gen.
Lich. no. 41.
Agde (Gallia).Var. *docellina*, Mer.Mereschkovsky, Tabulæ Generum Lichenum (1913), *Lecanora*, ii.
no. 38 (ex Gallia, Docelle, Vosges).

Thallus parum evolutus, dispersus, granulatus. Ad saxa arenacea.

Spec. orig. (1) in herb. meo Kazani, (2) in Tab. Gen.
Lich. no. 38.
Gallia.*Lecanora carpinea*, forma *carneopallida*, Mer.

Mereschkovsky, Nachtr. z. Flechtenl. Umgeg. Revals, Kazan, 1913.

Apotheciis disco cervino-carneo vel læte brunneo, semper lætiore
quam in forma *nuda*, Elenk., plus minus (sed semper leviter)
pruinoso, rarius nudo.*Spec. orig.* (numeros.) in herb. meo Kazani.
Esthlandia: Reval.

Forma *distantella*, Mer.

Mereschkovsky, Enum. lich. in prov. baltica hucusque cognitorum, Kazan, 1913.

Apothecia minores, orbicularia, semper valde distantes, margine bene evoluto, disco plano, pruinoso. Comparanda cum forma *leptyrodem*, Nyl.

Spec. orig. in herb. meo Kazani.

Esthlandia: Reval.

Forma *obscura*, Mer.

Mereschkovsky, Nachtr. z. Flechtenl. Umgeg. Revals, Kazan, 1913.

Apotheciis obscuris, nigrescentibus, nudis vel subnudis.

Spec. orig. (numeros.) in herb. meo Kazani.

Esthlandia: Reval.

Var. *latericola*, Mer.

Mereschkovsky, Contrib. fl. lichénol. envir. Kazan, Hedwigia, 1919, p. 202.

Thallus parum evolutus, evanescens, cinereo-albescens, H_2O —. Apothecia parva vel submedia, disco convexo, livido-griseo, pruinoso, margine thallino integro. In lateribus.

Spec. orig. (numeros.) in herb. meo Kazani.

Kazan.

Var. *fusconigra*, Mer.

Mereschkovsky, Matér. p. une Monogr. d. genre *Lecanora*.

Thallus cinereus. Apothecia parva, 0·3–0·7 millim. lata (1·2 millim. haud superantes), numerosa, conferta, angulosa, primum applanata, demum elevata et mutuo pressione nonnihil flexuosa, disco primum plano vel concavo, demum convexo, livido-fusco, fusco vel fusco-nigro, interdum nigrescente, leviter pruinoso vel subnudo. Apothecia disco $CaCl_2O_2$ + flavescente, margine thallino tenui, albido-cinereo, rarius subevanescente.

Spec. orig. in herb. Conservat. botan. Genève (vide Tabulam *Lecanoræ carpineæ*).

Geneva.

Var. *minuta*, forma *expallida*, Mer.

Mereschkovsky, l. c.

Spec. orig. in herb. Conservat. botan. Genève (vide Tabulam *Lecanoræ carpineæ*).

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Lecanora chlarona, forma *albinea*, Mer.

Mereschkovsky, Matér. p. une Monogr. d. genre *Lecanora*.

Thallus determinatus vel subeffusus, crassiusculus vel sat crassus, granuloso-verrucosus, haud pulverulentus, lacteo-albus, colore griseo vel glaucescente (ut plus minus in typo videtur) omnino destitutus; apothecia media, circiter 1 (usque ad 1·3) millim. lata, parum elevata vel subapplanata, subconferta vel contigua, interdum mutuo pressione subangulosa, disco planiusculo vel convexiusculo, brunneo vel rufo-fusco (ut in forma *applanata*, Mer.), nudo, margine thallope mediocre, parum vel vix discum superante, distincte minuteque granulato-crenulato.

Spec. orig. (1) in herb. Conservat. botan. Genevæ (vide Tabulas *Lecanoræ chlaronæ*), (2) in herb. Brit. Mus. Lugano (Helvetia italica).

Forma *applanata*, Mer.

Mereschkovsky, *l. c.*

Thallus indeterminatus, sat tenuis, crassitudine ut in forma typica, ambitu in hypothallo albo evanescens, granulatus, albidus (simul ut in forma *albinea*), in herbario tempore sordide lutescens; apothecia mediocria, vulgo 0·8–1·3 (usque ad 1·5) millim. lata, orbicularia, numerosissima, conferta, sed haud compressa, nec angulosa, plana et arcte aduata, quasi adpressa, una altera haud superantes, disco plano (statu juvenili concaviusculo), rufo-fusco vel læte brunneolo (couleur de cuir), nudo; margine mediocri vel subtenui (ut in forma typica), disco parum superante, albo (thallo concolore), tenuiter, distincte regulariterque granulato-crenulato (valde distinctior quam in Lich. ticin. exs. no. 14 et 15).

Spec. orig. (1) in herb. Conservat. botan. Genevæ (vide Tabulas *Lecanoræ chlaronæ*), (2) in herb. Brit. Mus.

Forma *griseola*, Mer.

Mereschkovsky, *l. c.*

Thallus bene evolutus, haud albus; apotheciis dense griseo-pruinosis, disco rugoso.

Spec. orig. in herb. meo Kazani.
Austria Inferior.

Forma *pallescens*, Mer.

Mereschkovsky, *l. c.*

Thallus subevanescens, albus; apotheciis pallide testaceis, sæpe subdifformibus, margine tenui, albo, minute granulato-crenulato.

Spec. orig. in herb. Conservat. botan. Genevæ (vide Tabulas *Lecanoræ chlaronæ*).

Lugano (Helvetia italica).

Var. *coronata*, forma *livida*, Mer.

Mereschkovsky, Nachrag z. Flechtenl. a. d. Umgeg. Revals, Kazan, 1913.

Apotheciis disco livido.

Spec. orig. in herb. meo Kazani.

Esthlandia: Reval.

Var. *incurvodentata*, Mer.

Mereschkovsky, Schedulæ ad Lich. ticin. exsiccatos, in Annuaire d. Conservat. et Jard. bot. d. Genève, vol. xxi, 1919, p. 152.

Thallus et margo apotheciorum obscuriores (quam in typo), glaucocinerei. Apothecia latitudine ut in typo sed minus regularia, margine tenuiore, inciso-crenulato, crenulis incurvo-dentatis, simul ut in *Lecanora allophana*. Epithecium granulosum ut in typo, superne strato amorpho haud instructum.

Spec. orig. (1) in herb. Conservat. botan. Genevæ, (2) in Mereschkovsky, Lich. ticin. exs. no. 16.

Geneva (Helvetia).

Forma *convexa*, Mer.

Mereschkovsky, *l. c.* p. 216.

Thallus cinereus; apothecia brunneola, convexiuscula vel convexa, interdum subbotryosa, margine tenui vel subevanescente, thallo concolore.

Spec. orig. in herb. Conservat. botan. Genevæ (vide Tabulas *Lecanoræ chlaronæ*).

Geneva (Helvetia).

Forma *obscura*, Mer.

Mereschkovsky, *l. c.*

Thallo et margine apotheciorum griseo-plumbeis, disco obscure fusco-nigro, apotheciis 0·8–1·6 millim.

Spec. orig. (1) in herb. Conservat. botan. Genevæ (vide Tabulas *Lecanoræ chlaronæ*), (2) in herb. Brit. Mus.

Geneva (Helvetia).

Forma subpruinosa, Mer.

Mereschkovsky, *l. c.*

Thallus sordide albescens vel griseolo-albivirens; apothecia brunnea, margine tenui; integro, vel vix crenulato et tum crenulis incurvo-dentatis.

Spec. orig. in herb. Brit. Mus.

Var. *lividula*, Mer.

Mereschkovsky, *l. c.*

Thallus cinereus, tenuis; apothecia mediocria, 0·5–1 millim. lata, sparsa vel subconferta, appanata, disco livido vel livido-cervino, convexo, interdum ruguloso, nudo vel subnudo, margine tenui, integro vel vix crenulato.

Spec. orig. (1) in herb. Conservat. botan. Genevæ (vide Tabulas *Lecanoræ chloronæ*), (2) in herb. Brit. Mus. Lugano (Helvetia italica).

Var. *minor*, forma *minutissima*, Mer.

Mereschkovsky, *l. c.*

Thallus sordide albo-cinereus; apothecia minora, 0·08–0·5 millim., vulgo invisibilia oculo nudo.

Spec. orig. (1) in herb. Conservat. botan. Genevæ (vide Tabulas *Lecanoræ chloronæ*), (2) in herb. Brit. Mus. Lugano (Helvetia italica).

Lecanora coarctata, forma *depauperata*, Mer.

Mereschkovsky, Tabulæ Generum Lichenum, *Lecanora*, iii. no. 59 (ex Austria).

Thallus griseus, parum evolutus, e granulis minutis rare sparsis, interdum subcrenulatis compositus; superficie lævi, haud farinosa nec sorediosa.

Spec. orig. (1) in herb. meo Kazani, (2) in Tab. Gen. Lich. no. 59.

Esthlandia: Reval. Austria Inferior (Mönichkirchen).

Lecanora coilocarpa, forma *xylita*, subforma *pruinata*, Mer.

Mereschkovsky, Matér. p. une Monogr. d. genre *Lecanora*.

Apotheciis pruinosis (in forma *xylita* apothecia semper nuda sunt).

Spec. orig. in herb. Conservat. botan. Genevæ. Lugano (Helvetia italica).

Var. *fuscorufa*, Mer., forma *convexiuscula*, Mer.

Mereschkovsky, l. c.

Thallus cinereus, minute granulosus; apothecia sparsa, minora quam in typo, circiter ut in forma *virella* hujus varietatis, disco convexiusculo vel convexo, testaceo-rufescente vel fusco-rufo vel fusco, nudo, margine tenui vel tenuissimo vel demum subevanescente, integro vel sæpius plus minus minute crenulato. Unacum varietate *fuscorufa*.

Spec. orig. (1) in herb. Conservat. botan. Genevæ (vide Tabulam *Lecanoræ coilocarpæ*), (2) in herb. Brit. Mus., (3) in herb. Parisii (Muséum), (4) in herb. Univ. Upsalæ, (5) in herb. Harv. Univ. Cambridge (U.S.A.).

Lugano (Helvetia italica).

Forma *subpruinosa*, Mer.

Mereschkovsky, l. c.

Apothecia paullum majora, discreta, regulariter orbicularia, disco fusco, leviter subpruinoso, convexiusculo. Differt a *Lecanora atrynea*, in Norrl. et Nyl. Herb. Lich. Fenn. no. 132, apotheciis haud planis vel concavis, ut in *atrynea*, sed convexiusculis.

Spec. orig. in herb. Conservat. botan. Genevæ (vide Tabulam *Lecanoræ coilocarpæ*).

Lugano (Helvetia italica).

Lecanora crenulatissima, Mer.

Mereschkovsky, Excurs. lichénol. dans les steppes Kirghises (Mont Bogdo); Troudy (Travaux) d. l. Soc. des Natur. d. l'Univ. d. Kazan, Année 1911.

Thallus albineus, mediocris, subgranulatus; apothecia mediocria, orbicularia, disco nigro, nudo, margine albido, granulato-crenulatissimo, crenulis minutis, numerosis, moniliformibus, valde regulariter dispositis. Ad saxa arenacea.

Spec. orig. in herb. meo Kazani.

Gubernia Astrachan; Tauria.

Forma *pezizoidea*, Mer.

Mereschkovsky, Addit. ad lichenogr. Rossiaë, i., Oesterr. Botan. Zeitschr. 1921.

Margine thallode apotheciorum ut in forma typica at apotheciis majoribus, usque ad 3-4 millim. latis, cupuliformibus, disco atro, nudo. Ad saxa arenacea.

Spec. orig. in herb. meo Kazani.

Rossia, gubern. Astrachan.

Lecanora dispersa, forma *obscura*, Mer.

Mereschkovsky, Beitr. z. Kenntn. d. Flecht. Umgd. v. Reval, Kazan, 1909.

Apotheciis obscurioribus.

Spec. orig. in herb. meo Kazani.
Esthlandia : Reval.

Lecanora elenkinii, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos (no. 31), Kazan, 1913; id. Contrib. fl. lichén. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallus tenuis, parum evolutus, lutescente-albidus; apothecia media vel submedia vel mediocria, elevata, margine concolore, tumido, discum valde superante, involuto, disco plano vel concaviusculo.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Rossiaë exs. no. 31, (3) in ejusdem Tabulæ Generum Lichenum (1913), *Lecanora*, i. no. 29 (e Tauria).
Tauria.

Forma *albinea*, Mer.

Mereschkovsky, Contrib. fl. lichénol. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallo et margine apotheciorum albo; thallo pulverulento.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Tabulæ Generum Lichenum (1913), *Lecanora*, i. no. 30 (e Tauria : Sinferopolis).
Tauria. Austria meridionalis!

Lecanora gangaleoides, forma *ornata*, Mer.

Mereschkovsky, Tabulæ Generum Lichenum, Kazan, 1913, *Lecanora*, ii. no. 52 (ex Gallia, Docelles (Vosges)).

Apotheciis foliolis thallinis ornatis. Est forma potentialis (vide Hedwigia, 1919, p. 206).

Spec. orig. in herb. meo Kazani.

Forma *plumbea*, Mer.

Mereschkovsky, l. c. no. 53 (e Gallia, Docelles (Vosges)).

Thallo plumbeo.

Spec. orig. in herb. meo Kazani; vide etiam in Tab. Gen. Lich. no. 53.
Gallia : Docelles (Vosges).

Lecanora hageni, forma *brunneola*, Mer.

Mereschkovsky, Matér. p. une Monogr. d. genre *Lecanora*.

Apotheciis obscurioribus, fusco-brunneolis. Ad saxa granitica. Comparanda cum *Lecanora brunneola*, Mer., in Mereschkovsky, Tabulæ Generum Lich. Kazan, 1913, *Lecanora*, i. no. 37 (ex Austria, Mönichkirchen).

Spec. orig. in herb. Conservat. botan. Genevæ.
Lugano.

Forma *microcarpa*, Mer.

Mereschkovsky, Schedulæ ad Lich. ticin. exsiccatos, Annuaire du Conservatoire et Jard. bot. d. Genève, vol. xxi. 1919, p. 165.

Apothecia minuta, sat uniformia, distantes, vulgo 0·3 millim. (0·2–0·4 millim.) lata, margine sæpius subcrenulato vel crenulato.

Spec. orig. (1) in herb. Conservat. botan. Genevæ, (2) in herb. Parisii (Muséum), (3) in herb. Brit. Mus.

Is certainly not a young state of the type.
Lugano ; Geneva (Helvetia).

Forma *perplexoides*, Mer.

Mereschkovsky, Matér. p. une Monogr. d. genre *Lecanora*.

Thallus parum evolutus, albidus, subgranulatus, hypothallo albo ; apothecia media, 0·6–1 millim. (0·4–1·2 millim.) lata, concreta, mutuo pressione elevata, orbicularia vel subflexuosa, margine tenui integro, interdum leviter crenulato discum parum superante, albedo ; disco plano vel interdum subconvexo, pallide livido-brunneolo, nudo. Habitu nonnullum *Lecanoram perplexam*, Mer., commemorans. Ad saxa granitica.

Spec. orig. (1) in herb. Conservat. botan. Genevæ, (2) in herb. Brit. Mus.

Lugano (Helvetia italica).

Lecanora perplexa, Mer.

Syn. *Lecanora crenulata*, multor. auctorum, præcipue rossicorum.

Lecanora galactina, Harm. Lich. Lothar. no. 564.

Lecanora galactina, forma *ligniaria*, Nyl. in Norrl. et Nyl. H. L. F. no. 139 (vide Hainand, Lich. d. Fr. p. 1006).

Lecanora albella, var. *hageni*, in Mudd, Exsicc. no. 115.

Lecanora galactina, Ach. in Hepp. Flecht. Eur. no. 180.

Exsicc. Mereschkovsky, Licht. Ross. exsicc. no. 9 (sub *Lecanora crenulata* (Dicks.), Wain. ; ejusdem Tabulæ Gen. Lich. Kazan, 1913, *Lecanora*, i. no. 21 (sub nomine vero).

Ad saxa calcarea, præsertim supra muros.

Thallus parum evolutus, e granulis paucis applanatis vel plus

minusve convexis in vicino apotheciorum dispositis compositus, vulgo obsoletus vel invisibilis, albicans vel griseo-albicans, opacus. Reactione KOH—, CaCl_2O_2 —, $\text{KOH}(\text{CaCl}_2\text{O}_2)$ —, H_2O —. Apothecia vulgo media vel majuscula, latitudine valde variabili, 0.3–3.7 millim. lata, vulgo 1–2 millim. lata, numerosissima, conferta, mutuo pressione irregulares, flexuosa, valde elevata, basin versus constricta, haud arcte adfixa et tum facile cadescentes, margine thallo concolore, mediocri, integro vel leviter irregulariterque crenulato, disco sordide brunneo, pruinoso. Paraphyses tenues, filiformes, haud articulatae, arcte cohaerentes. Sporae 8nae, simplices, ellipsoideae vel ovoideo-ellipsoideae, longitudine 0.0110–0.0138 millim., crassitudine 0.0048–0.0072 millim. (usque ad 0.0164 millim. longit. et 0.0096 millim. crassit.).

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 9, (3) in ejusdem Tab. Gen. Lich. no. 21. Rossia Media; Esthonia; Fennia; Tauria. Etiam in Anglia, Gallia, Germania et Austria occurrit.

Forma *delicata*, Mer.

Mereschkovsky, Nachtr. z. Flechtenl. a. d. Umgeg. Revals, Kazan, 1913.

Apotheciis minoribus, magis applanatis regulariterque rotundatis, haud flexuosis, basin versus minus constrictis. Ad muros calcareos et cementum earum.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Tabulae Generum Lich. Kazan, 1913, *Lecanora*, i. no. 20 (e Reval).

Esthlandia: Reval. Gallia: Docelles (Vosges).

Var. *grisea*, Mer.

Mereschkovsky, Nachtr. z. Flechtenl. a. d. Umgeg. Revals, Kazan, 1913 (sub *Lecanora crenulata*, var.).

Colore griseo thalli et marginis apotheciorum constanter a typo differt. Ad saxa calcarea.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 10, (3) in ejusdem Tabulae Gen. Lich. Kazan, 1913, *Lecanora*, i. no. 22 (e Reval).

Esthlandia: Reval.

Var. *wasmuthi*, Mer.

Mereschkovsky, Excurs. lichénol. dans les steppes Kirghises (Mont Bogdo), Kazan, 1911 (sub *Lecanora wasmuthi*, Mer.).

Colore thalli et apotheciorum sordide lutescente-brunneo constanter a forma typica differt. Thallus KOH et CaCl_2O_2 +.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, *Tabulæ Generum Lich. Kazan*, 1913, *Lecanora*, i. no. 23 (ex gub. Astrachan).

Gubern. Astrachan. Tauria. Saxicola.

Lecanora subfusca, forma *griseola*, Mer.

Mereschkovsky, *Addit. lichenogr. Ross. i., Oesterr. Botan. Zeitschr.* 1921.

Thallo griseolo (in typo thallus constanter albescens), sec. specim. meo.

Spec. orig. in Malme, *Lich. Suec.* no. 69 (sub *Lecanora subfusca*).

Kazani. Suecia.

Forma *collocarpoides*, Mer.

Mereschkovsky, *Matér. p. une Monogr. d. genre Lecanora*.

Thallus tenuis, albineus; apothecia dispersa, orbicularia, vulgo 0·8–1·2 millim. lata (usque ad 1·5 millim.), disco fusco-nigro, madefacto rufo-fusco, subconvexo, nudo, margine thallino medioeri, haud inflexo, crenulato.

Spec. orig. in herb. Conservat. botan. Genevæ (vide *Tabulam Lecanoræ subfuscæ*), (2) in herb. Brit. Mus.

Prope Genevæ.

Forma *microcarpa*, Mer., subforma *umbrinula*, Mer.

Mereschkovsky, *l. c.*

Apotheciis confertis, 0·5–1 millim. latis, convexiusculis vel convexis, umbrino-fuscis vel fusco-nigricantibus, nudis, nitidiusculis, margine tenui vel tenuissimo, griseo-cinerascente, tenuiter crenulato. Thallus et margo apotheciorum KOH+ flavescens.

Spec. orig. in herb. Brit. Mus.

Lugano, supra Fagum.

Var. *brachyspora*, Mer.

Thallus tenuissimus; apothecia 0·6–1 millim. lata, margine crassiusculo, integro vel vix crenulato, disco rufo, plano, nudo; epithecium granulatum sporæ late ellipsoideæ, subsphæricæ, longitudine 10–12 m., crassitudine 9–10 m. Est *Lecanora subfusca*, var. *Pinastri anzi*, *Lich. minus rari Ital. super.*, no. 186, descripta a Hue (Caus. s. le *Lecan. subfusca*, *Bull. Soc. bot. d. Fr.* 1903, p. 81) sine nomine. Verisimiliter species peculiaris est.

Var. *minor* (Oliv.), Mer., forma *decussata*, Mer.

Thallus, apothecia et sporæ ut in varietate (vide specim. a meo determin. in herb. Conservat. bot. Genevæ et in herb. Brit. Mus.), at thallo lineis nigris distinctissimis decussato. Supra corticem fagi.

Spec. orig. (1) in herb. Conservat. botan. Genevæ (vide Tabulam *Lecanoræ subfuscæ*), (2) in herb. Brit. Mus.

Grand Salève, prope Genevæ.

Lecanora umbrina, forma *subbotryosa*, Mer.

Mereschkovsky, Hedwigia, 1919, p. 203; id. Matér. p. une Monogr. d. genre *Lecanora*.

Apotheciis convexis, subbotryosis. Supra corticem cerasi.

Spec. orig. in herb. Conservat. botan. Genevæ.

Lugano (Helvetia).

Aspicilia asterias, Mer.

Thallus determinatus, placas rotundas vel subrotundas formans, ambitu pseudofiguratas, sordide albidus vel lacteo-candidus, lævigatus, opacus, rimoso-areolatus; areolis quadrangularis vel multangulis, marginem thallinum versus in radiis regulariter dispositis, rimis dichotomice subdivisis, lobos radiantes æmulantibus. Apothecia immersa, nigra, nuda plus minusve pruinosa. In rupe calcarea.

Spec. orig. in herb. meo Kazani.

Tauria. Gallia meridionalis prope Nice.

Aspicilia cerebroides, Mer.

Thallus liberus, glebulas irregulariter rotundatas, 15–28 millim. longas et 9–20 millim. latas formans, superficie gyrosa ex areolis tumidis elongatisque hypertrophyce crescentibus, circumvolutiones cerebrales in memoriam revocantibus contextus. Intus in sectione thallus albus, haud marmoreus ut in *Aspicilia esculenta*. Apothecia non visa. Vide figura in Elenkin, Wanderflechten, in Bullet. Jard. Botan. d. St. Pétersb. t. i. tab. i. linea iv. fig. 6, 8, linea v. fig. 6, 7.

Spec. orig. (1) in Mereschkovsky, Tabulæ Generum Lichenum, Kazan, 1913, *Aspicilia*, i. (*Spherothallia*) no. 18 (e Tian Schan); (2) in herb. meo Kazani (sub *Aspicilia alpicola*).

Aspicilia desertorum, forma *ferruginea*, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos, no. 17, Kazan, 1913.

Thallus et apothecia sicut in forma typica, at colore ferrugineo thalli ab hæc differt. Saxicola. Potius lusus est.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 17, (3) in ejusdem Tabulæ Gen. Lich. *Aspicilia*, i. (*Sphærothallia*) no. 2 (e Monte Bogdo).

Gubernia Astrachan.

Forma *sublævata*, Mer.

Mereschkovsky, Excurs. lichénol. d. l. steppes Kirghises (Mont Bogdo), Kazan, 1911 (cum fig.).

Apotheciis planioribus, marginibus tenuioribus minusque elevatis, disco dense pruinoso.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Tabulæ Gen. Lich. Kazan, 1913, *Aspicilia*, i. (*Sphærothallia*) no. 3 (e Mons Bogdo).

The apothecia, quite Lecanorine in the type, present a more *Aspicilian* aspect in this form.

Gubernia Astrachan. Ad saxa argillaceo-schistosa.

Var. *aspera*, Mer.

Mereschkovsky, *l. c.* (cum fig.).

Thallus asperus, spinulis vel protuberantiis spinulosis brevibus irregularibusque plus minus instructus. Saxicola et terricola.

Spec. orig. ibidem (Tabulæ Gen. Lich. no. 6) (Mons Bogdo). Gubernia Astrachan. Tauria. Asia Media.

Forma *hispidoides*, Mer.

Mereschkovsky, *l. c.* (cum fig.).

Thallus haud liberus, subfruticulosus, ramulis elongatis, erectis subramosis, superficie irregulariter rugoso, aliquantulum *Aspiciliam hispidam*, Mer., in memoriam revocans. Terricola et saxicola.

Spec. orig. in herb. meo Kazani. Gubernia Astrachan. Asia Media.

Var. *incisa*, Mer.

Mereschkovsky, *l. c.* (cum fig.).

Apotheciis minoribus, immersis, crateriformibus, margine thallino acuto, inciso, sæpe fere totum discum oblecto. Forsan potius species peculiaris sit. Saxicola.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Tabulæ Gen. Lich. Kazan, 1913, *Aspicilia*, i. (*Sphærothallia*) no. 4.

Gubernia Astrachan. Asia Media.

Var. *nigrescens*, Mer.

Mereschkovsky, *l. c.* (cum fig.).

Thallus crustaceus, effusus, crassus, e tuberculis mastoideis, 2-3 millim. (vel plus) longis, circiter 1-2 millim. latis, confertis, contextus; nigrescens vel olivaceo-nigrescens, cyphellis albidis ornatus. Sterilis. In rupibus arenaceis.

Spec. orig. in herb. meo Kazani.

Gubernia Astrachan.

Var. *semivagans*, Mer.

Mereschkovsky, *l. c.* (cum fig.).

Thallus pro parte crustaceus, pro parte glebulos minutos formans statu libero viventes. Areolæ thalli sat similis species sed superficie paulo nitidiuseculo et cyphellis magis immersis.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Tabulæ Gen. Lich., *Aspicilia*, i. no. 5.

Aspicilia dubia, Mer., var. *microphyllina*, Mer.

Mereschkovsky, Addit. ad Lichenogr. Ross. i., in Oesterr. Bot. Zeitschr. 1921.

Tuberculis thalli minutis.

Spec. orig. in Mereschkovsky, Tabulæ Gen. Lich. Kazan, 1913, *Aspicilia*, i. (*Sphærothallia*) no. 16 (e Tian-Schan).

The type of the species is represented in my 'Tabulæ Generum Lichenorum' by no. 15. The var. *microphyllina* (no. 16) has the tuberculæ one-half or one-third the size of those in the type.

Aspicilia esculenta, forma *retusa*, Mer.

Thallo minore, vulgo 10 millim. (8-15 millim.) lato, sordide griseo-albescente, squamulis minoribus, minus prominulis, retusis,

passim subverrucosus. Apotheciis crateriformibus, minutis vel minutissimis punctiformisque, vulgo 0·3–0·5 millim. (0·1–1 millim.) latis, in verrucis plus minusve conicis profunde immersis, margine inciso-crenato, disco nigro, leviter pruinoso.

Spec. orig. (1) in herb. Conservat. botan. Genevæ, (2) in Museo Botan. Univ. Genevæ, (3) in herb. Brit. Mus. Provincia Ural.

Aspicilia fruticulosa, forma *minor*, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos, Kazan, 1913, p. 14.

Thallo minore, circiter 1 centim. lato (0·8–1·6 millim.), ramulis paullulum tenuioribus, sed dense contextis ut in typo, granulis ad superficiem thalli circiter 16–20 in uno centimetro (in typo 10–14 in 1 centim.).

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Tabulæ Gen. Lich. Kazan, 1913, *Aspicilia*, i. (*Sphaerothallia*), no. 10, (3) in herb. Conservat. botan. Genevæ.

In desertis Kirgisorum. Tauria. Asia Media (Akmo-linsk).

Forma *taurica*, Mer.

Mereschkovsky, *l. c.*

Thallo minore, circiter 1–1¼ centim. lato, laxiusculo, ramis ramulisque discretis a forma typica bene differt. Semper sterilis.

Spec. orig. ibidem (Tabulæ Gen. Lich. no. 9). Etiam in Mereschkovsky, Lich. Ross. exsicc. no. 21.

Gubernia Astrachan. Tauria.

Var. *tenuatula*, Mer.

Mereschkovsky, Contrib. conn. lich. gouv. Vladimir, Troudy (Travaux), d. l. soc. d. Natur. de l'Univ. d. Kazan, 1911; id. Schedulæ ad Lich. R. exs. Kazan, 1913, p. 14; id. Contrib. fl. lich. Crimée, Ann. d. sc. nat. Botanique, 1921 (cum. fig.).

Thallus magnitudine ut in forma typica speciei, sed ramulis valde tenuioribus, confertis, granulis ad superficiem thalli circiter 18–22 in uno centimetro (in typo 10–14 in 1 centim.).

Spec. orig. (1) in herb. meo Kazani, (2) in herb. cryptog. Horti Petropolit. (sub alio nomine).

Tian-Schan.

Aspicilia hispida, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos, Kazan, 1913 (no. 34).

Thallus liberus, fruticulosus, latitudine circiter 2 centim., ramis tenuis, cylindricis, glabris, laxè ramosis, apicibus sensim attenuatis tenuisque in spiis terminatis. Semper sterilis. Supra terram statu libero.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 34.

Rossia meridio-orientalis.

Forma *cæspitosa*, Mer.

Mereschkovsky, Excurs. lichénol. d. l. steppes Kirghises (Mont Bogdo), Kazan, 1911 (cum fig.).

Thallus cæspitosus, radiculoidis ad terram adfixus.

Spec. orig. in herb. meo Kazani.

Gubernia Astrachan (Rossia).

Forma *parvula*, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos, Kazan, 1903 (no. 35); id. Contrib. fl. lichén. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921 (cum fig.).

Thallo liberus, minor, irregulariter parciusque ramosus, interdum centro placas formans. Supra terram, statu libero.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 35.

Tauria.

Aspicilia lacunosa, Mer.

Mereschkovsky, Excurs. lichénol. dans les steppes Kirghises (Mont Bogdo), Troudy (Travaux), d. l. soc. d. Natur. d. l'Univ. d. Kazan.

Thallus liberus, sordide griseus, glebulas irregulares parvas circiter 5 millim. in diametro, subcomplanatas vel rotundato-subangulatas formans, opacus lævis, glaber, hinc inde depressionibus lacunosus vel foveolis plus minusve profundis munitus, neque lobatus, nec areolatus, nec gyrosus ut in *Aspicilia cerebroides*, Mer. Sterilis. Supra terram statu libero.

Spec. orig. in herb. meo Kazani.

Asia Media: provincia Semipalatensk, distr. Zaisan.

Aspicilia mirabilis, Mer.

Mereschkovsky, Contrib. fl. lichénol. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallus determinatus, crassiusculus, cæσιο-cinereus, punctis obscuris adpersus, lævigatus, subnitidus, rimoso-areolatus, ambitu subeffignratus, areolis quadrangulis in radiis margine versus dichotomiæ subdivisis et plus minusve in lineis concentricis regulariter dispositis. Fulcribus valde ab *Aspicilia asterias*, Mer., differt. Ad saxa calcarca (circ. 1000 m. altit.).

Spec. orig. (unicum) in herb. meo Kazani.
Tauria.

Candelaria medians, forma *sordida*, Mer.

Mereschkovsky, Contrib. fl. lichén. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallus indeterminatus, valde expansus, crassiusculus, diffracto-areolatus, subverrucoso-inæqualis, griseo-luteus, sordidus, lobis obsolete. Reactio thalli KOH—. In rupibus calcareis.

Spec. orig. in herb. meo Kazani.
Tauria.

Candelariella vitellina, var. *pulvinata*, forma *macrior*, Mer.

Mereschkovsky, Nachtr. z. Flechtenl. Umgeg. Revals, Kazan, 1913.

Granulis thalli valde majoribus quam in var. *pulvinata* typica. Ad saxa erratica.

Spec. orig. in herb. meo Kazani.
E-thlandia : Reval.

Theloschistes brevior, var. *caspicus*, Mer.

Thallus brevis, 1-1½ centim. altus, pallide carneo rufescens vel rufescens (terra concolor?), superne glaber, opacus, subtus pallidior, albicans, haud nervosus, dichotomicè laciniatus, laciniis convolutis, angustis, linearibus, convexis, circiter 1 millim. latis vel paulo majus, canaliculatis, apicibus subtruncatis. Sterilis. Supra terram argillosam.

Spec. orig. in herb. meo Kazani.
Baku, Caucasus.

Var. *halophilus*, Mer.

Thallus major et crassior quam in var. *caspico*, Mer., circiter 3-5 centim. altus vel plus, pallidus, livido-lutescens vel livido-albescens, cartilagineus, subtus concolor, nervoso-reticulatus, arbusculos ramosos formans, laciniis subdichotomicè divisis et subdivisis, compressis, planis vel leviter canaliculatis, circiter 2-3 millim. latis, sublinearibus vel apicem versus paullum dilatatis, plus minusve furfuraceo-rugosis præsertim apicem versus. Semper sterilis.

Spec. orig. in herb. meo Kazani.

Gubernia Astrachan. Asia Media (Djungaria).

Xanthoria parietina, var. *adpressa*, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos, Kazan, 1913; vide etiam Hedwigia, 1919, p. 209.

Thallus rosulas usque ad 1 decim. formans, tenuior ut in typo, arcte ad substratum adpressus, lobis vulgo paullulum angustioribus. Ad corticem arborum.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exs. no. 40.

Rossia Media. Esthlandia. Tauria. Gallia. Austria. Helvetia.

Var. *aureola*, forma *isidiotyta*, Mer.

Thallus aureo-aurantiacus, centro minute papillato-isidiosus; apothecia magna, margine isidiis brevibus ornato. Ad trabes.

Spec. orig. in herb. Conservat. botan. Genevæ (a Lèveillé in Tauria lectum).

Tauria.

It is possibly the same as the var. *isidioidea* (Belts.), Zahlbr., which, however, cannot be ascertained without a comparison with the original specimen of the latter.

The following is a list of all known European forms of *Xanthoria parietina* :—

1. *Xanthoria parietina* (L.), Th. Fr., type.
2. ———, forma *aurata* (Mass.), Lich. ital. exs. no. 33.
3. ———, forma *chlorina* (Chev.), Oliv. Mereschk. Lich. tic. exs. no. 83.
4. ———, forma *cinerascens* (Leight.), Sandst. Crombie Brit. Lich. i. p. 298.
5. ———, forma *dispersa*, Oliv. Bull. Soc. bot. d. Fr. 1894, p. 94.
6. ———, forma *imbricata* (Mass.), Zahlbr. Crypt. exs. no. 1979.

7. *Xanthoria parietina*, forma *nodulosa* (Floerk.), Hillm. Ann. Mycol. 1920, p. 15.
8. ———, forma *pycnocarpa* (Müll. Arg.), Mer. in herb. Boissier Genevæ.
9. ———, var. *adpressa*, Mer. Lich. Ross. exs. no. 42.
10. ———, var. *angusta*, B. d. Lesd., Mereschkovsky, Lich. Ross. exs. no. 41.
11. ———, var. *aureola* (Ach.), Th. Fr., Mereschkovsky, Lich. Ross. exs. no. 40.
12. ——— ———, forma *congranulata* (Cromb.), Brit. Lich. p. 298.
13. ——— ———, forma *isidiotyla*, Mer., *vide supra*.
14. ——— ———, forma *tumida* (Wedd.), Hillm. Boistel, ii. p. 70.
15. ——— ———, var. *coralloides* (Flot.), Hillm. *l. c.* p. 19.
16. ——— ———, var. *ectanea*, Molbr. et auct. (haud Ach.).
17. ——— ———, forma *ectaneoides* (Nyl.), Oliv. Zahlbruckner Patag. p. 50.
18. ——— ———, var. *elegantissima*, Zahlbr. Denkschr. Ak. Wiss. Wien, 1915, p. 39.
19. ——— ———, var. *microphylla*, Zahlbr. Fl. Dalm. vii. 1919.
20. ——— ———, var. *prolifera* (Humb.).
21. ——— ———, var. *retirugosa*, Stur. apud Zahlbr. Fl. Dalm. ii. 1903, p. 333.
22. ——— ———, var. *rutilans* (Ach.), Synops. p. 210.
23. ——— ———, var. *splendidula*, Zahlbr. Trausbaik. Lich. 1909.

Xanthoria substellaris, forma *lychneoides*, Mer.

Mereschkovsky, Contrib. fl. lichénol. d. l. Crimée, Hedwigia, 1919, p. 210.

Thallus lobis brevibus, adscendentibus vel subadscendentibus, confertis ad oras arcte sorediatis; apothecia plana, disco thalli intensius colorato, aurantiaco vel fulvescente-aurantiaco, margine sæpe sorediato.

Spec. orig. in herb. meo Kazani; *spec. a me determin.* in herb. Conservat. botan. Genevæ.
Kazan, Helvetia.

Gasparrinia aurantia, var. *brevilobata*, forma *illobata*, Mer.

Thallo, apotheciis et sporis ut in var. *brevilobata*, Nyl., sed lobis periphericis omnino constanterque destituto.

Over twenty good specimens of this form will be found in my collections in Kazan, prepared for my 'Tabulæ Generum Lichenum.'

Spec. orig. in herb. meo Kazani.

Pyren.-Orient. prope Port Vendres, Collioure (Gallia), ad saxa micaceo-schistoso.

Var. *papillata*, Mer.

Mereschkovsky, Contrib. fl. lichénol. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallus papillis elongatis cylindricis vel subcylindricis obtectus.

Spec. orig. in herb. meo Kazani.

Tauria.

Gasparrinia callopisma, forma *dispersa*, Mer.

Thallo e fragmentis loborum dispersis discretisque, rosulas haud formantibus composito.

I have seen several rocks, about $\frac{1}{2}$ – $\frac{3}{4}$ metr. in height, entirely covered with this form in an apparently healthy state, without any trace of the type-species, which, however, occurred in the vicinity.

Over twenty good specimens of this form will be found in my collections in Kazan, prepared for my 'Tabulæ Generum Lichenum.'

Spec. orig. in herb. meo Kazani.

Beaulieu, prope Nice (Gallia), 300 m. altit. Ad saxa calcarea jurassica.

Forma *purpurea*, Mer.

Mereschkovsky, *l. c.*

Thallo colore purpuraceo-aurantiaco a forma typica differt.

Spec. orig. ibidem.

Tauria. Italia (Capri).

Gasparrinia cirrochroa, forma *roseola*, Mer.

Mereschkovsky, *l. c.*

Thallo colore plus minusve roseolo et lobis paullulum latioribus et magis applanatis a forma typica differt.

Spec. orig. (1) in herb. meo Kazani, (2) in herb. Conservat. botan. Genevæ (specim. a me determin.), (3) in herb. Brit. Mus.

Tauria. Lugano (Helvetia italica).

Forma *subleprosa*, Mer.

Mereschkovsky, *l. c.*

Thallo pro maxime parte in crusta leprosa dissoluto.

Spec. orig. (numeros.) ibidem.

Tauria. Lugano (Helvetia italica).

Gasparrinia decipiens, forma *fulva*, Mer.

Mereschkovsky, Contrib. fl. lichénol. d. envir. d. Kazan, Hedwigia, 1919, p. 212.

Colore thalli aurantiaco vel rubigineo-aurantiaco distincte a typo differt. Ad trabes et ligna artefacta.

Spec. orig. (numeros.) in herb. meo Kazani.
Rossia Media (Kazan).

Forma *gracilior*, Mer.

Mereschkovsky, *l. c.*

Thallo lobis gracilioribus a forma typica bene differt. In lateribus.

Spec. orig. (numeros.) ibidem.
Rossia (Kazan).

Gasparrinia flava, Mer.

Thallus citrino-flavus (colore ut in *Gasparrinia decipiente* vel sub-simile), KOH +, esorediosus, rosulas regulares formans, lobis bene evolutis, radiantibus, adpressis, planiusculis, concretis; apothecia concoloria, bimarginata. Comparanda cum *Gasparrinia aurantia*, forma *sulphurata* (Harm.), Mer. (Harmand, Lich. d. Fr. p. 810).

Spec. orig. in herb. meo Kazani.
Tauria, prope Sinferopolin, ad saxa calcarea nummulitica.

Gasparrinia granulosa, var. *perminuta*, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exsiccatos, Kazan, 1913.

Thallus minutus, fulvo-aurantiacus, granulosis (ut in forma typica), rosulas minutas 2-4 millim. latas formans, sæpe confluentes et tum thallus diffusus; lobis tenuissimis, oculo nudo invisibilibus. Semper sterilis. Ad saxa calcarea.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. ticin. no. 63.
Tauria.

Gasparrinia jailensis, Mer.

Thallus aurantiacus, parte centrali diffracto-areolato, areolis subeffiguratis vel effiguratis, lobis periphericis parum evolutis.

Spec. orig. in herb. meo Kazani.

Having left all my collections and notes in Russia, I am unable to give a more detailed diagnosis of this species here.

Gasparrinia murorum, forma *albula*, Mer.

Mereschkovsky, Nachtr. z. Flechtenl. a. d. Umgeg. Revals, Kazan, 1913.

Thallo albulo vel hinc inde levissime flavescente. Ad saxa calcarea.

Spec. orig. in herb. meo Kazani.

Esthlandia: Reval. Germania.

Forma *pulvinulum*, Mer.

Thallus orbicularis, crassus, centro valde elevatus, pulvinulas formans, sporis angustis sunt in var. *tenuispora*, Mer.

Over twenty good specimens of this form will be found in my collections in Kazan, prepared for my 'Tabulæ Generum Lichenum.'

Spec. orig. in herb. meo Kazani.

Soemmering: Adlitzgraben (Austria), in rupibus calcareis.

Growing at a short distance from var. *tenuispora*, into which it gradually passes.

Var. *tenuispora*, Mer.

Thallus crassitudine configuratione, colore, etc., ut in typo speciei sed sporis angustis, subcylindricis, crassitudine circiter 0.004-0.005 millim. (in typo 0.006-0.007 millim.).

Over twenty good specimens of this variety will be found in my collections in Kazan, prepared for my 'Tabulæ Generum Lichenum.'

Spec. orig. in herb. meo Kazani.

Soemmering: Adlitzgraben (Austria), in rupibus calcareis.

Var. *subfulva*, Mer.

Mereschkovsky, Contrib. fl. lich. d. l. Crimée, Ann. d. sc. nat. Botanique, 1921.

Thallus fulvo-aurantiacus, centro vulgo pallidiore et sæpe partim cinerascens; apothecia intensior colorata, sæpe convexa, immarginata. Differentia minima, sed constantissima esse videtur.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Tabulæ Gen. Lich., *Gasparrinia*, i. no. 77 (exist. only in Mus. bot. Acad. of Sc. of Petrograd and in the herb. Horti Petropolitani).

Esthlandia: Reval. Tauria.

The observation of a great number of specimens of the type (Reval) and of the variety (Crimea) in natural conditions, sometimes growing side by side, has shown the latter to be

a very constant form, constituting rather a variety than a form.

Caloplaca cerina (Ehrh.), Zahlbr., var. *holocarpa*,
forma *fulva*, Mer.

Mereschkovsky, Contrib. fl. lich. envir. Kazan, Hedwigia, 1919, p. 214.

Apotheciis fulvis a forma typica varietatis holocarpæ differt. Ad ligna.

Spec. orig. in herb. meo Kazani.
Kazan.

Cladonia alpestris, forma *tenella*, Mer.

Mereschkovsky, l. c. p. 215.

Podetiis minoribus tenuioribusque, haud colore thalli a forma typica differt.

Spec. orig. in herb. meo Kazani.
Kazan.

Cladonia cornuta, forma *fuscata*, Mer.

Mereschkovsky, Addit. ad Lichenogr. Ross. i., Oesterr. Bot. Zeitschr. 1921.

Podetiis fuscescentibus vel fusco-rufescentibus.

Spec. orig. in herb. meo Kazani.
Sibiria : Tomsk.

Cladonia fimbriata, forma *crustulosa*, Mer.

Mereschkovsky, Nachtr. z. Flechtenl. aus d. Umgeg. Revals, Kazan, 1913, p. 40.

Thallus foliis erectis, densissime confertis, crustam compactam diffractam formans. Podetia abbreviata, scyphifera. Ad truncos arborum frondosarum basin versus.

Spec. orig. (numeros.) in herb. meo Kazani.
Esthlandia : Reval.

Var. *arboricola*, Mer.

Mereschkovsky, l. c.

Podetiis paucis, minutis vel minutissimis, cylindricis, scyphiferis, scyphis angustis, minutis, parum evolutis, margine scyphorum integro. Ad truncos arborum (quercus) usque ad 3 metr. altitudine et ultra, haud et basin etiam supra ramos transiens. Comparanda cum forma *tenuipes* (Del.), Malbr.

Spec. orig. (numerosissim.) ibidem.
Esthlandia : Reval.

Cladonia floerkeana, var. *carcata*, forma *deplexa*, Mer.

“Podetiis albido-einerascentibus, densissime granuloso-isidiosis vel minute granuloso-squamulosis.—Etiam Olivier, Herb. Lich. de l'Orne (1880), no. 254, teste Arnold, Flora, 1884, p. 81, huc pertinet.” Wainio, Monogr. Clad. i. p. 83.—Est Norrl. et Nyland, Herb. Lich. Fenn. no. 444 (t. Wainio).

Fennia.

Cladonia furcata, var. *pinnata*, forma *tenuior*, Mer.

Mereschkovsky, Nachtr. z. Flechtenl. Umgeg. Revals, Kazan, 1913.
Podetiis minoribus et tenuioribus.

Spec. orig. in herb. meo Kazani.
Esthlandia: Reval.

Cladonia rangiferina, forma *cœrulea*, Mer.

Mereschkovsky, Contrib. fl. lichén.envir. Kazan, Hedwigia, 1919, p. 217.
Thallus cœspites subsphaericas formans. Colore podetiorum cœrulescente et omnibus partibus tenuioribus et minoribus a forma typica bene differt; apicibus ramorum ut in typo unilateraliter vergentibus. Supra terram.

Spec. orig. (numeros.) in herb. meo Kazani.
Rossia Media (Kazan).

Forma *denudata*, Mer.

Mereschkovsky, *l. c.* p. 218.
Ramis ramulis parvis præcipueque parte inferiori denudatis a forma typica differt; colore podetiorum ut in typo.

Spec. orig. in herb. meo Kazani.
Belgia.

Forma *intricata*, Mer.

Mereschkovsky, *l. c.* p. 217.
Ramulis superioribus tenuioribus, densioribus et subintricatis a forma typica distincte differt. Colore podetiorum ut in typo, normalis.

Spec. orig. (numeros.) ibidem.
Rossia Media (Kazan).

Forma *subarbuscula*, Mer.

Mereschkovsky, *l. c.* p. 218.
Ramulis lateralibus modo subverticillato ad ramos primarios dispositis a forma typica differt. Colore podetiorum normalis.

Spec. orig. (numeros.) ibidem.
 Rossia Media (Kazan).

Var. *albinea*, Mer.

Mereschkovsky, *l. c.* p. 218; etiam Addit. Lich. Ross. i., Oesterr. Bot. Zeitschr. 1921.

Colore podetiorum albino vel albo et crassitudine majore constanter a typo valde differt. Forma polaris esse videtur.

Spec. orig. in herb. meo Kazani.
 Gubern. Archangelsk (Rossia). Sibiria (Tomsk).

Physcia farrea, forma *delabrata*, Mer.

Mereschkovsky, Contrib. fl. lich. envir. Kazan, Hedwigia, 1919, p. 222.

Thallo pallidiore, laxiusculo, laciniis longioribus, minus fornicatis, passim subpalmate divisis. Ad basin truncorum arborum frondosarum (*Betulae albae*).

Spec. orig. (numeros.) in herb. meo Kazani.
 Rossia Media (Kazan).

Forma *furfurascens*, Mer.

Mereschkovsky, *l. c.* p. 223.

Thallus minor, obscurior, fusco-nigricans, sæpe rosulas $1\frac{1}{2}$ –3 centim. latis formans, laciniis brevioribus, magis congestibus, margine passim parce furfurascens. Ad truncos arborum frondosarum.

Spec. orig. (numeros.) ibidem.
 Rossia Media (Kazan).

Physcia labrata, Mer., var. *capitulata*, Mer.

Mereschkovsky, *l. c.* p. 224.

Thallus indeterminatus, valde extensus, rosulas haud formans (aut forsan statu juvenili), virescente griseus, madefactus læte viridis (H_2O+), e laciniis brevibus subincurvatis, apice terram versus spectantibus, apicibus recurvis. Laciiniæ apice capitulato-sorediosæ, sorediis viridis, capitulas majusculas elevatas, sphaerico-inflatas, circiter 1–2 millim. latas formantibus. Sterilis. Ad truncos arborum frondosarum, præcipue *betulae*.

Spec. orig. (numeros.) ibidem.
 Rossia Media (Kazan).

Var. *detrita*, forma *albescens*, Mer.

Mereschkovsky, *l. c.* p. 224.

Thallo sordide albescente vel griseo-albescente. Ad sœpimenta.

Spec. orig. (numeros.) ibidem.

Rossia Media (Kazan).

Forma *nigrescens*, Mer.

Mereschkovsky, *l. c.*

Thallo obscuro cinereo-nigrescente vel nigrescente; apothecia parva, disco nigro, nudo, margine integro. Ad sœpimenta.

Spec. orig. (numeros.) ibidem.

Rossia Media (Kazan).

In order to make the distinction between the two allied species—*Physcia labrata*, Mer., and *Physcia virella* (Ach.), Mer.—more clear, I give here two figures showing the peripheral lobes, and below a longitudinal section along a lobe. The darkened parts represent the sorals, being superficial in *Ph. virella* and terminal or lateral in *Ph. labrata*.

Fig. 1.

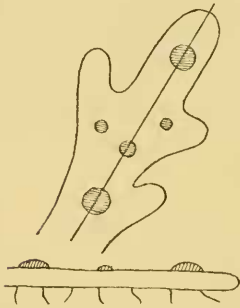


Fig. 2.

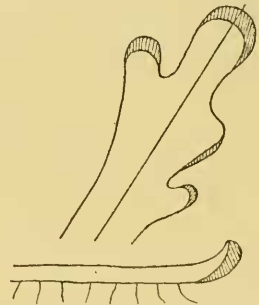


Fig. 1.—*Physcia virella* (Ach.), Mer.

Fig. 2.—*Physcia labrata*, Mer.

Physcia obscura, forma *dispersa*, Mer.

Mereschkovsky, *Contrib. fl. lichénol. d. envir. d. Kazan, Hedwigia*, 1919, p. 226.

Thallo cinereo, sicut in forma typica, sœpe valde extenso, laciniis brevibus, sparsis, rosulas haud formans, sorediis destituito; apothecia mediocria vel sat parva, disco fusco-nigricante, nudo,

margine integro. Ad corticem lævigatam præcipue tiliæ (etiam populi juven.).

Spec. orig. (numerossim.) in herb. meo Kazani.
Rossia Media (Kazan).

Physcia pulverulenta, forma *granulosa*, Mer.

Mereschkovsky, *l. c.* p. 227.

Thallus epruinosis, griseus vel subglaucescente- vel olivascente-griseus, lobis latis concretisque ut in typo, superno granulis elevatis nudis plus minusve numerosis obtectus; apothecia vulgo passim parce foliolis thallinis munito.

Spec. orig. (numerossim.) in herb. meo Kazani.
Rossia Media (Kazan). Esthlandia.

Subforma *fruticulosa*, Mer.

Mereschkovsky, *l. c.* p. 228.

Thallus erectus vel subdecumbens, fruticulosus, e ramulis elongatis, teretiusculis, pro parte e granulis evolutis, laxe subramosis, consistens; lobis adpressis quasi destitutus. In rimis corticis arborum frondosarum, locis umbrosis.

Spec. orig. ibidem.
Rossia Media (Kazan).

Forma *rugosa*, Mer.

Mereschkovsky, *l. c.* p. 229.

Thallus colore et forma laciniarum ut in typo vel interdum subfuscens vel cervino- vel cinereo-olivaceo-rufescens vel cinereo-subfuscens, leviter pruinosis vel nudus; apothecia margine crasso, irregulariter rugoso- vel granuloso-crenulato.

Spec. orig. (numerossim.) (1) ibidem, (2) in herb. Conservat. botan. Genevæ (specim. a me determin.).
Rossia Media (Kazan). Helvetia.

Forma *venustoides*, Mer.

Mereschkovsky, Nachtrag z. Flechtenliste a. d. Umgeg. Revals, Kazan, 1913.

Thallus nudus, brunneo-rufescens vel rufescens vel cinereo-brunneus, laciniis latis concretisque ut in typo; apothecia margine integro ut in typo, sed foliolis thallinis passim parce ornato.

Spec. orig. (numerossim.) in herb. meo Kazani.
Rossia Media (Kazan). Esthlandia.

Var. *angustata*, forma *nuda*, Mer.

Mereschkovsky, Schedulæ ad Lich. ticin. exsiccatos, in *Annuaire du Conservat. et Jard. bot. d. Genève*, vol. xxi. 1919, p. 192.

Thallo fusco, nudo vel hinc inde leviter pruinoso.

Spec. orig. (1) in herb. meo Kazani (numeros.), (2) in herb. Conservat. botan. Genève, (3) in Mereschkovsky, Lich. ticin. exs. no. 70.

Rossia. Helvetia.

Var. *argyphæa*, forma *centrofusca*, Mer.

Mereschkovsky, Schedulæ ad Lich. Ross. exs. Kazan, 1913 (no. 50); *Hedwigia*, 1919, p. 230.

Thallus albo-suffusus, centrum versus sordide griseo-fuscescens, epruinosis, laciniis interdum leviter angustioribus; apothecia ut in var. *argyphæa*.

Spec. orig. (1) in herb. meo Kazani, (2) in Mereschkovsky, Lich. Ross. exsicc. no. 50:

Rossia Media (Kazan).

Forma *granulata*, Mer.

Mereschkovsky, *Contrib. fl. lichénol. envir. Kazan*, *Hedwigia*, 1919, p. 231.

Thallus albo-pruinosis, granuloso-diffractus, laciniis periphericis vix ullis vel brevissimis.

Spec. orig. (numeros.) (1) in herb. meo Kazani, (2) in herb. Conservat. botan. Genève.

Rossia. Helvetia.

Var. *imbricata*, forma *microphyllina*, Mer.

Mereschkovsky, *l. c.*

Laciniis brevioribus angustioribusque, minus quam 1 millim. latis.

Spec. orig. in herb. meo Kazani.

Rossia Media (Kazan).

Var. *rufescens*, Mer.

Mereschkovsky, *l. c.*

Thallus brunneus, fuscus vel rufo-fuscus; apothecia disco plus minusve pruinosis, marginibus thallinis destitutis in quid a var. *venusta* differt. Forsan est melius forma considerenda.

Spec. orig. (numeros.) in herb. meo Kazani.

Rossia Media (Kazan).

Physcia stellaris, forma *albo-granulosa*, Mer.

Mereschkovsky, Contrib. connoiss. lich. gouv. Vladimir, Troudy (Tra-vaux), d. l. soc. d. Natur. d. l'Univ. d. Kazan, 1911; id. Contrib. fl. lich. Kazan, Hedwigia, 1919, p. 232.

Thallus albus, granuloso-inæqualis præcipue centrum versus.

Spec. orig. (numeros.) in herb. meo Kazani.

Rossia Media. Esthlandia: Reval.

Physcia tribacia, var. *labrosa*, Mer.

Mereschkovsky, Contrib. fl. lichén. envir. Kazan, Hedwigia, 1919, p. 234.

Thallo griseo-virescente, laciniis magis erectis, irregulariter subconfertis, labroso-sorediatis a typo valde differt. Forsan ad *Physciam labratam* pertinet. Ad corticem arborum.

Spec. orig. (numeros.) in herb. meo Kazani.

Rossia Media. Esthlandia: Reval.

Physcia virella, var. *setosoides*, Mer.

Mereschkovsky, l. c. p. 236.

Thallus cinereo-virescens, rosulas sæpe confluentes formans, sorediosus, sorediis viridis; laciniæ ciliis marginalibus plus minus numerosis, bene visibilibus modo *Physcia setosæ* munitæ. Sterilis. Ad corticem tiliæ.

Spec. orig. (numeros.) ibidem.

Rossia Media (Kazan).

Rhizocarpon geographicum, var. *microareolata*, Mer.

Thallus intense flavescens, areolis minutissimis, circiter 0.4-0.5 millim. latis (vel minor), confertis, planis; apotheciis minutis inter areolis immixtis.

Spec. orig. in herb. meo Kazani.

Austria Inferior (Mönichkirchen)*.

Verrucaria calciseda, forma *roseola*, Mer.

"Thallo roseolo."

Spec. orig. (numeros.) in herb. meo Kazani.

Austria Inferior (Wiener Wald).

Numerous new forms of *Graphis scripta*, with Latin diagnoses, have been or are to be described by the author in his

* Without my notes, left in Russia, I am not quite sure of the locality: it is either Austria or Gallia meridionalis.

paper, "Matériaux pour une Monographie du Genre *Graphis*," in 'Annuaire du Conservatoire et Jardin botanique de Genève,' vol. xxi. 1921. Another set of new species, varieties, and forms of different kinds of lichens, also accompanied with Latin diagnoses, can be found in my paper "Schedulæ ad Lichenes ticinenses exsiccatos" in the same 'Annuaire du Conservatoire botan. &c.,' vol. xxi. 1919, pp. 145-216.

In my previous paper in this Magazine, "On some new Forms of Lichens" (Ann. & Mag. Nat. Hist. ser. 8, vol. vi. p. 482, Nov. 1920), the two following should be added to the list of forms belonging to *Physcia pulverulenta* (pp. 484-485):—forma *nigricans*, Müll. Arg. (Classif. p. 35; Flagey, Lich. d. l. Franche-Comté, i. p. 182), and forma *nuda*, Harm. (Lich. d. Fr. p. 634).

CORRECTION.

While my paper "On some new Forms of Lichens," recently published in this Magazine (vol. vi. 1920, p. 482), was in the press, I sent to the editors two supplementary forms to be added to those belonging to the species *Physcia pulverulenta* (l. c. p. 484), of which one—forma *nigricans*, Müll. Arg.—has been erroneously put as a form of the var. *angustata*, to which it does not belong, being a form of the species itself, while the other—forma *nuda*, Herm.—has been omitted altogether.

After correcting these errors and adding another form which I previously omitted (forma *deminuta*, Cromb.), the list of forms belonging to *Physcia pulverulenta* will now read as follows:—

1. *Physcia pulverulenta* (Schreb.), Nyl.
2. ———, forma *delicata*, Mer.
3. ———, forma *deminuta*, Cromb. Brit. Lich. i. p. 306.
4. ———, forma *granulosa*, Mer. (Hedw. 1919, p. 227).
5. ———, subforma *fruticulososa*, Mer. (Hedw. 1919, p. 228).
6. ———, forma *nigricans*, Müll. Arg. (Classif. p. 35).
7. ———, forma *nuda*, Harm. Lich. d. Fr. p. 634.
8. ———, forma *polita*, Flot.
9. ———, forma *rugosa*, Mer. (Hedw. 1919, p. 229).
10. ———, forma *subvenusta* (Nyl.).
11. ———, forma *turgida* (Schaer.), Harm.
12. ———, forma *turgidula*, Mer.
13. ———, forma *venustoides*, Mer. (Hedw. 1919, p. 229).
14. ———, var. *angustata* (Hoffm.), Ach.
15. ———, forma *convexa*, Mer.
16. ———, forma *elegantella*, Mer.
17. ———, forma *nuda*, Mer. (Hedw. 1919, p. 230).
18. ———, var. *aquiloides*, Mer.

19. *Physcia pulverulenta*, var. *argyphæa*, Ach.
20. ————, forma *centrofusca*, Mer. (Hedw. 1919, p. 230).
21. ————, forma *granulata*, Mer. (Hedw. 1919, p. 231).
22. ————, var. *imbricata*, B. de Lesd.
23. ————, forma *microphyllina*, Mer. (Hedw. 1919, p. 231).
24. ————, var. *lepidota*, Mer.
25. ————, var. *rufescens*, Mer. (Hedw. 1919, p. 231).
26. ————, var. *subpapillosa*, Cromb. Brit. Lich. i.
27. ————, var. *venusta* (Ach.).

On page 484 of the above-mentioned paper the name *Physcia pulverulenta* placed before forma *elegantella*, Mer., must be deleted, this form belonging to the var. *angustata*, and not to the species itself.

On page 485, line 9 from the bottom, for "minoribus" read "tenuioribus."

APPENDIX.

'*Lichenes Rossie exsiccati.*' Edited by Prof. Dr. C. MERESCHKOVSKY. Kazan, 1913. Fasciculi I.—III.

This exsiccata work, of which Harmand wrote to me "je le trouve idéal sous tous les rapports," is very little known. It cannot be purchased now; but, when the Jewish domination in Russia is over and order established, those who want to acquire it are requested to apply to Dr. John Briquet, Director of the Botanical Garden in Geneva (Switzerland), to whom I have transferred my rights in this work.

The three fascicules that have already appeared contain the following species* :—

Fasciculus I.

1. *Ramalina fraxinea*, var. *calicuriiformis*.
2. ———— *populina*.
3. ———— *polymorpha*.
4. *Parmelia prolixa*.
5. ———— *tubulosa*.
6. ———— *ryssolea*.
7. ———— *taurica*, sp. n.
8. *Lecanora tristis*, sp. n.
9. ———— *perplexa*, sp. n.†.
10. ————, var. *grisea*, nov.
11. ———— *crenulata* †.

* I am introducing some necessary corrections into this list, viz. :—

No. 9. *Lecanora perplexa*, sp. n., instead of *L. crenulata*.

No. 11. *Lecanora crenulata*, instead of *L. caesiocalba*.

No. 36. *Lecanora carpinea*, which is the right name of *L. angulosa*.

No. 59. *Parmelia caperata*, which is the right name of *P. cylisphora*.

† This name must be put in place of the old one.

12. *Squamaria muralis*, forma *albomarginata*.
13. ———, var. *diffracta*.
14. ———, var. *brunneola*, nov.
15. *Aspicilia cinerea*, forma *dendritica*, nov.
16. ——— *desertorum*.
17. ———, forma *ferruginea*, nov.
18. ——— *esculenta*.
19. ——— *affinis*.
20. ——— *fruticulosa*.
21. ———, forma *taurica*, nov.
22. *Caloplaca brachyspora*, sp. n.
23. ——— (*Pyrenodesmia*) *chalibæa*.
24. *Xanthoria lobulata*.
25. *Lepraria flava*.

Fasciculus II.

26. *Ramatina fruvinea*.
27. *Parmelia isidiotyta*.
28. *Evernia thamnodes*.
29. *Lecanora umbrina*, var. *cæσιο-pruinosa*.
30. ——— *subcarnea*.
31. ——— *elenkinii*, sp. n.
32. ——— *dispersa*.
33. ——— *glaucella*, var. *nigrescens*.
34. *Aspicilia hispida*, sp. n.
35. ———, forma *parvula*, nov.
36. *Lecanora carpinea* (syn. *angulosa*).
37. *Candelariu concolor*, var. *granulosa*.
38. *Candelariella cerinella*, var. *unilocularis*.
39. *Stereocaulon paschale*.
40. *X. parietina*, var. *aureola*.
41. ———, var. *angusta*.
42. ———, var. *adpressa*, nov.
43. *Caloplaca cerina*.
44. ———, var. *holocarpa*.
45. *Gasparrinia decipiens*.
46. ——— *murorum*.
47. ———, var. *scopularis*.
48. *Physcia pulverulenta*.
49. ———, var. *arypphaea*.
50. ———, forma *centrofusca*, nov.

Fasciculus III.

51. *Umbilicaria pustulata*.
52. *Usnea florida*, forma *humilis*.
53. ———, var. *hirta*, forma *minutissima*, nov.
54. *Parmelia centrifuga*.
55. ——— *conspersa*.
56. ——— *vagans*.
57. ———, var. *desertorum*.
58. ———, forma *elegans*, nov.
59. ——— *caperata* (Hoffm.), Nyl.
60. *Lecanora atra*, var. *urceolata*, nov.
61. *A. cinerea*.
62. *Xanthoria polycarpa*.
63. *Gasparrinia granulosa*, var. *perminuta*, nov.

64. *Cladonia sylvatica*.
65. — *alpestris*.
66. — *rangiferina*.
67. — *verticillata*.
68. — *turgida*.
69. *Buellia epipolia*.
70. *Physcia tribacia*.
71. — *virella*.
72. — —, forma *georgiensis*.
73. *Graphis scripta*, var. *pulverulenta*.
74. *Arthopyrenia rhyponia*.
75. *Lepraria cinereo-sulphurea*.

My collections in Kazan contain material for ten more fascicules. It is hoped that some lichenologist will undertake the continuation of this work after my death.

‘*Tabulæ Generum Lichenum.*’

Edited by Prof. Dr. C. MERESCHKOVSKY.

This work is still less known than the previous one. Only five tabulæ have been issued, but material exists, gathered during my travels through the whole of Europe, for about thirty-five tabulæ.

The tabulæ that have already appeared—they can also be obtained later on through Dr. J. Briquet, Geneva—include the following genera:—

- Lecanora*, I., II., and III.
Aspicilia, I. (*Sphærothallia*).
Gasparrinia, I.

These have been acquired by (1) the Academy of Science of Petrograd, (2) Hortus botanicus petropolitanus, (3) University of Kazan.

I give here the contents of these five tabulæ, and add the localities (which they do not contain) as far as I can remember, all my notes having been left in Russia:—

ASPICILIA I. (*Sphærothallia*).

1. *Aspicilia desertorum* (Kremplh.), Mer. Bogdo in gubernia Astrachan (Rossia).
2. — —, forma *ferruginea*, Mer. Ibidem.
3. — —, forma *sublavata*, Mer. Ibidem.
4. — —, var. *incisa*, Mer. Pr. p. ibidem, pr. p. Provincia Syr. Darja, prope locum Kyzil-Khul (Rossia).
5. — — *semivagans*, Mer. Tauria: Ai Petri (Rossia).
6. — —, var. *aspera*, Mer. Bogdo in gubernia Astrachan (Rossia).
7. — — *esculenta* (Eversm.), Mer. Ibidem.

8. *Aspicilia fruticulosa* (Eversm.), Mer. Ibidem.
9. — —, forma *taurica*, Mer. Tauria prope Sinferopolin (Rossia).
10. — —, forma *minor*, Mer. Tauria, prope Sinferopolin; C. Akmolinsk in Asia Media (Rossia).
11. — — *affinis* (Eversm.), Mer. Bogde in gubernia Astrachan (Rossia).
12. — —, var. *intermedia*, Mer. Akmolinsk in Asia Media (Rossia).
13. — — *hispida*, Mer. Bogdo in gubernia Astrachan (Rossia).
14. — —, forma *parvula*, Mer. Tauria, prope Sinferopolin (Rossia).
15. — — *dubia*, Mer. Tian-Schan, Asia Media (Rossia).
16. — —, var. *microphyllina*, Mer. Ibidem.
17. — —, var. *fruticulosofoliacea* (Elenk.), Mer. Ibidem.
18. — — *cerebroides*, Mer.*. Turkestan, prope Kaschgaria (Rossia).
19. — — *jussufii* (Link), Mer. Algeria.

LECANORA (sp. Saxicolæ), I.

20. *Lecanora perplexa*, Mer., forma *delicata*, Mer. Reval (Rossia)?, vel Docelles, Vosges (Gallia).
21. — —, Mer. Reval (Rossia).
22. — —, var. *grisea*, Mer. Ibidem.
23. — — *wasmuthi*, Mer. Bogdo in gubernia Astrachan (Rossia).
24. — — *tristis*, Mer. Kazan (Rossia).
25. — —, forma *obscurata*, Mer. Ibidem.
26. — — *albescens*, var. *dispersa* (Nyl.), Mer. Collioure, Pyren.-Orient. (Gallia).
27. — — *crenulata* (Dicks.), Wain. Tauria, prope Sinferopolin (Rossia).
28. — —, forma *dispersa*, Flot. Soemmering: Adlitzgraben (Austria).
29. — — *elenkini*, Mer. Tauria: Monasterium St. Georgii (Rossia).
30. — —, forma *albinea*, Mer. Tauria, prope Sinferopolin (Rossia).
31. — — *albescens* (Koffm.), Th. Fr. Reval (Rossia).
32. — —, forma *confertiuscula*, Mer. Ibidem.
33. — —, forma *granulosa*, Mer. Ibidem.
34. — —, var. *deminuta* (Stenh.), Th. Fr. Ibidem.
35. — —, var. *monsauri* (Mass.), Mer. Tauria: Chersones (Rossia).
36. — —, var. *dispersa*, forma *aggregata*, Mer. Collioure, Pyren.-Orient. (Gallia).
37. — — *brunneola*, Mer. Mönichkirchen (Austria).

LECANORA (sp. Saxicolæ), II.

38. *Lecanora campestris*, var. *docellina*, Mer. Docelles, Vosges (Gallia).
39. — — (Schaer.). Concarneau (Gallia).
40. — —, forma *atrata*, Nyl. Agde, Hérault (Gallia).

* The former name, *Aspicilia alpicola*, Elenk., must be replaced by this new one.

41. *Lecanora campestris*, forma *subimmersa*, Mer. Ibidem.
42. — —, var. *effigurata*, Mer. Pyren., Amélie les Bains (Gallia).
43. — — *cenisea*, var. *atrynea* (Ach.), Nyl. Monte Amiata, Sienna (Italia).
44. — —, Ach. Wechselgebiet, Mönichkirchen (Austria).
45. — —, var. *melucarpa*, Nyl. Monte Amiata, Sienna (Italia).
46. — — *atra*, var. *grumosa* (Pers.), Ach. Docelles, Vosges (Gallia).
47. — —, var. *urceolata*, Mer. Tauria: Castel (Rossia).
48. — — (Huds.), Ach. Tauria (Rossia), pr. p.
49. — — *gangaleoides*, Nyl. Ibidem.
50. — — *atra*, var. *calcareo*, Jatta. Capri (Italia), pr. p. Tauria.
51. — — *gangaleoides*, forma *albonigra* (Stnr.), Mer. Tauria, Castel (Rossia).
52. — —, forma *ornata*, Mer. Docelles, Vosges (Gallia).
53. — —, forma *plumbea*, Mer. Docelles, Vosges (Gallia).

LECANORA (sp. Saxicolæ), III.

54. *Lecanora polytropa*, var. *alpigena*, Schaer. Wechselgebiet, Mönichkirchen (Austria).
55. — — (Ehrh.), Th. Fr.
56. — —, forma *illusoria*, Ach. Reval?, vel Mönichkirchen (Austria).
57. — —, var. *intricata* (Schrad.), Nyl. Wechselgebiet (Austria).
58. — —, forma *robusta*, Mer. Wechselgebiet, Mönichkirchen (Austria).
59. — — *coarctata*, forma *depauperata*, Mer. Wechselgebiet, Mönichkirchen (Austria).
60. — — (Sm.), Ach. Reval (Rossia).
61. — —, var. *eluchista*, Ach. Ibidem.
62. — — *latzeii*, Zahlbr. Dalmatia.
63. — — *coarctata*, var. *elaschista*, forma *cotaria*, Ach. Reval (Rossia)?
64. — — *sordida* (Pers.), Th. Fr. Wechselgebiet, Mönichkirchen, (Austria).
65. — —, forma *leptoplaca*, Nyl. Reval (Rossia).
66. — —, forma *complanata*, Leight. Wechselgebiet, Mönichkirchen (Austria).
67. — —, var. *sulphurata*, Ach. Tauria, Castel (Rossia).
68. — —, forma *subradiosa* (Nyl.), Mer. Pyrén., Amélie-les-Bains (Gallia).
69. — —, var. *swartzii* (Ach.), Mer. Docelles, Vosges (Gallia).
70. — —, forma *pseudosubcarnea* (Harm.), Mer. Ibidem.
71. — — *subcarnea* (Sm.), Ach. Tauria (Rossia).

GASPARRINIA I.

72. *Gasparrinia murorum* (Hoffm.), Tornab. Reval (Rossia).
73. — —, var. *tenuispora*, Mer. Soemmering: Adlitzgraben (Austria).
74. — —, var. *scopularis* (Nyl.). Reval (Rossia).
75. — —, var. *tenuispora*, forma *pulvinulum*, Mer. Soemmering: Adlitzgraben (Austria).
76. — — *corticolu* (Nyl.), Mer. Planta Saxicola, Reval (Rossia).

77. *Gasparrinia murorum*, var. *subfulva*, Mer. Tauria, prope Sinfieropolin (Rossia).
 78. — *corticicola* (Nyl.), Mer. Planta lignicola. Astrachan (Rossia).
 79. — *murorum*, var. *miniata* (Hoffm.), Th. Fr. Gallia.
 80. — —, var. *baumgartneri* (Zahlbr.). Mer. Austria.
 81. — *aurantia*, var. *thullincola* (Wedd.), Mer. Concarneau (Gallia).
 82. — *tegularis* (Ehrh.), Mer.*. Agde, Hérault (Gallia).
 83. — *aurantia*, var. *brevilobata*, forma *illobata*, Mer. Collioure, Pyren.-Orient. (Gallia).
 84. — *tenuata* (Nyl.), Mer. Beaulieu, Alp. Marit. (Gallia).
 85. — *pusilla* (Mass.), Tornab. Tauria, prope Jalta (Rossia).
 86. — *aurantia* (Pers.), Syd. Tauria, Castel (Rossia).
 87. — —, forma *centrifuga* (Mass.), Mer. Capri (Italia).
 88. — —, forma *mesoleuca* (Mass.), Mer.†. Beaulieu, Alp. Marit. (Gallia).
 89. — —, var. *brevilobata* (Nyl.), Mer. Collioure, Pyren.-Orient. (Gallia).

XXVII.—Notes from the Gatty Marine Laboratory, St. Andrews.—No. XLIII. By Prof. M'INTOSH, M.D., LL.D., D.Sc., F.R.S., &c.

Recent Additions to the British Marine Polychæta.

SINCE the publication of the earlier parts of the 'Monograph of the British Marine Polychæts' was commenced (nearly fifty years ago) many additions have been made, and some of these have already been described in the 'Annals and Magazine of Natural History.' Others will be indicated in the following notes.

Of the Euphrosynidæ, a post-larval form was procured by Mr. Chadwick in the surface tow-net off Port Erin in December 1905.

Anteriorly, in the microscopic preparation, the head consists of a somewhat shield-shaped lobe, broad and slightly dimpled in front, narrower behind, and with a more deeply stained clavate band along each side, at the anterior end of which is a minute dark eye. This shield-shaped region is minutely streaked and dotted, apparently from the minute

* The former name of no. 82, *Gasparrinia lobulata* (Sommerf.), had to be changed for this new one.

† In addition to this form, there exists undoubtedly a forma *centroleuca* (Mass.), Mer., which I have observed in Italy, distinct from the forma *mesoleuca* by the absence of concentric zones of yellow and white coloration on the thallus.